

NZCB Verification Report

Project Name:	Church Manor Way
Date of assessment	06/08/2023
Verified by	Sarah Howe
Project type	New build
Assessment objective	To determine the total carbon contribution of the development and offset to ensure the result of the development is Net Zero Carbon at practical completion.
Project location	Units 1-4, 5 Church Manor Way, Erith, DA8 1DG
Date of project completion	28 th April 2023
Property type	Warehouses
Building description	industrial buildings with associated office areas and hard landscaping
Size	8708.5m ²
Project design life	60yrs
Assessment scope	Shell and Core
Assessment stage	As built
Data Sources	As built drawings and specifications

Assumptions & Scenarios

Verification Statement

This verification has been conducted in accordance with RICS Methodology and EN 15978

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Life Cycle Assessments:

- the underlying data collected and used in the LCA calculations,
- the way the LCA-based calculations have been carried out,
- the presentation of environmental performance included in the EPD, and
- other additional environmental information included in the declaration, if existent with respect to the procedural and methodological requirements in ISO 14025:2010 and EN 15804:2011.

Company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and that the product does not violate relevant legislation.

I confirm that I have sufficient knowledge and experience of construction products, the construction industry, relevant standards and the geographical to carry out this verification.

I confirm that I have been independent in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have thus no conflicts of interest regarding this verification.

Name: Sarah Howe

Signature:



Date: 06/08/2023

Building Elements Coverage

#	Building Parts / Element Groups	Building Elements	Coverage (%)
0	Facilitating works	0.1 Temporary/Enabling works/Preliminaries	0
		0.2 Specialist groundworks	0
1	Substructure	1.1 Substructure	27.15
2	Substructure	2.1 Frame	32.51
		2.2 Upper floors incl. balconies	3.13
		2.3 Roof	5.94
		2.4 Stairs and ramps	0.94
	Superstructure	2.5 External Walls	4.98
		2.6 Windows and External Doors	0.53
	Superstructure	2.7 Internal Walls and Partitions	3.84
		2.8 Internal Doors	0.05
3	Finishes	3.1 Wall finishes	0.43
		3.2 Floor finishes	0.54
		3.3 Ceiling finishes	0.23
4	Fittings, furnishings and equipment (FF&E)	Building-related	0
		Non-building-related	0
5	Building services / MEP	5.1–5.14 Building-related* services	7
		Non-building-related	0
6	Prefabricated Buildings and Building Units	6.1 Prefabricated Buildings and Building Units	0
7	Work to Existing Building	7.1 Minor Demolition and Alteration Works	0
8	External Works	8.1 Site preparation works	0
		8.2 Roads, Paths, Pavings and Surfacing	0.45
		8.3 Soft landscaping, Planting and Irrigation Systems	0
		8.4 Fencing, Railings and Walls	0.38
		8.5 External fixtures	0
		8.6 External drainage	0
		8.7 External Services	0
		8.8 Minor Building Works and Ancillary Buildings	5.83

Embodied Carbon

Indicator	Amount
Total embodied carbon (tCO ₂ e & kgCO ₂ e/m ²) from construction (modules A1 to A5 of EN15978) at detailed design	4,542 / 520
Total embodied carbon (tCO ₂ e & kgCO ₂ e/m ²) from construction (modules A1 to A5 of EN15978) at practical completion	3,452 / 396
Total reduction in embodied carbon (tCO ₂ e & kgCO ₂ e/m ²) from construction (modules A1 to A5 of EN15978) at practical completion	1,090 / 124 (23.9%)
Total embodied carbon offset (tCO ₂ e) at practical completion	3,452
Net embodied carbon (tCO ₂ e) at practical completion	0

Carbon Offsets

Carbon offset approach used	Minimum / Leadership Transition Fund
International carbon offset standard used, amount and type of offset credit procured	3,452 credits in VERRA VCS, across REDD+ and renewable energy projects
Registry link	See Below
Weighted average cost per tonne of CO2e for carbon credits/units bought	£5 - £25

Project details	Standard	tCO2e
UK Tree Planting & Protecting the Amazon (VCS 981) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=212696	VCS	173
Kenya Tree Planting & Protecting the Amazon (VCS 981) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=205369	VCS	691
Gunung Sala Geothermal Energy Project (VCS 0144) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=166290	VCS	242
Srepok 1 Solar Power Project in Vietnam (VCS 1974) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=211583	VCS	345
Pacajai REDD+ Project (VCS 981) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=207416	VCS	1,035
Wind Project In Maharashtra By BWDPL (VCS 1254) https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=211582	VCS	966
Total		13,930